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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/621,149 | 07/15/2003 | James L. Kroening | 450.366US1 | 1189 |

7590 12/15/2005

Gateway, Inc.
Attention: Scott Charles Richardson
610 Gateway Drive, MD Y-04
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| EXAMINER |
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TRAN, DENISE

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| ART UNIT | PAPER NUMBER |
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2185

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/621,149

Applicant(s)

KROENING, JAMES L.

Examiner

Denise Tran

Art Unit

2185

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 20-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/15/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's election without traverse of claims 1-19 in the reply filed on 10/11/05 is acknowledged.

2. Claims 20-29 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/11/05.

3. Claims 1-19 are presented for examination.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 2-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "the at least one location" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the read buffer of the storage device" in line 1. There is insufficient antecedent basis for this limitation in the claim.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-4, 6, and 12-16 are rejected under 35 U.S.C. 102(a) as being anticipated by Tanaka et al., U.S. Patent No. 6,502,167.

As per claim 1, Tanaka teaches a method of writing information to a storage device, the method, implemented in the storage device comprising:

receiving a dual write command to write information to the storage device (e.g., fig. 8, col. 7, lines 50-60);

determining two locations to write the information (e.g., fig. 8, col. 7, line 55 to col. 8, line 6);

performing a single reading of the information to be written into a read buffer (e.g., fig. 3, CPU data to el. 30; col. 7, lines 55-60); and

writing the information to both of the two locations based on the single reading of the information (fig. 8 and fig. 3; col. 7, line 50 to col. 8, line 10).

As per claim 14, Tanaka teaches a method of writing information to a disk drive storage device (i.e. device stored data for disk drive; col. 4, lines 36-45), the method comprising:

receiving a command to write information to the storage device (e.g., fig. 8, col. 7, lines 50-60);

determining if the command is a dual write command (e.g., fig. 8, col. 7, line 55 to col. 8, line 6); if the command is a dual write command: determining two locations to write the information (e.g., fig. 8, col. 7, line 55 to col. 8, line 6); reading the information to be written into a read buffer (e.g., fig. 3, CPU data to el. 30; col. 7, lines 55-60); and writing the information to both of the two locations based up a single reading of the information (fig. 8 and fig. 3; col. 7, line 50 to col. 8, line 10).

As per claims 2, 3, 4, 6, 12-13, and 15-16, Tanaka teaches the at least one location is determined based on an address spread within the dual write command (i.e., two locations, e.g., fig. 8, col. 7, lines 50-60); wherein the read buffer of the storage device is not cleared between the writing of the information to both of the two locations (fig. 8 and fig. 3; col. 7, line 50 to col. 8, line 10); the information to be read is associated with a bit flag designating a dual write operation (e.g., col. 6, lines 55-60; col. 7, lines 50-60; i.e., dual command bit for dual write operation); one of the two locations is within a reserve area of the storage device (i.e., duplicated memories, e.g., abstract); the information is written to both of the locations during a same write cycle (e.g., fig. 20, col. 13, line 25-35); and writing the information to both locations comprises writing the information to a plurality of locations comprising both locations and at least one additional location (e.g., fig. 3, els. 120,140, 32,34) .

8. Claims 1, 3, 9-11, 13-14, 16, and 19 are rejected under 35 U.S.C. 102(b) as being anticipate by Kasebayashi et al. US 5,758,191 (hereinafter Kasebayashi) .

As per claim 14. Kasebayashi teaches a method of writing information to a disk drive storage device , the method comprising:

receiving a command to write information to the storage device (fig. 3, write command);

determining if the command is a dual write command (i.e., burst write having at least blocks; e.g., col. 2, lines 30-35; col. 6, lines 1-15); if the command is a dual write command: determining two locations to write the information (e.g., col. 6, lines 1-15); reading the information to be written into a read buffer (e.g., 3, el. 11); and writing the information to both of the two locations based up a single reading of the information (i.e., a single reading operation of the buffer; e.g., col. 6, lines 1-15).

As per claim 1, Kasebayashi, teaches a method of writing information to a storage device, the method, implemented in the storage device comprising:

receiving a dual write command to write information to the storage device (fig. 3, write command);

determining two locations to write the information (i.e., burst write can be 2 e.g., col. 2, lines 30-35; col. 6, lines 1-15);

performing a single reading of the information to be written into a read buffer (i.e., a single reading operation of the buffer; e.g., col. 6, lines 1-15); and

writing the information to both of the two locations based on the single reading of the information (i.e., a single reading operation of the buffer; e.g., col. 6, lines 1-15).

As per claims 3 and 16 Kasebayashi shows wherein a read buffer of the storage device is not cleared between the writing of information to both of the two locations (e.g., col. 6, lines 1-15);

As per claims 9-11, 13, and 19, Kasebayashi teaches wherein the storage device comprises a disk drive (e.g., fig. 6. el. 13); wherein the dual write command is a hard drive firmware command (e.g., col. 4, lines 60-65); the two locations comprise a first location and a second location based, the second location being upon a calculation performed on the first location (i.e., sequentially, e.g., col. 7, lines 35-50); writing the information to both locations comprises writing the information to a plurality of locations comprising both locations and at least one additional location (i.e., bust write operation or writing to locations of data buffer and disk; e.g., col. 7, lines 15-50) ; and data is first written into a location having a lower address than the location at which the data is written a second time (i.e., sequentially, e.g., col. 7, lines 35-50).

9. Claims 5, 7, 8, and 17-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Burgess et al. (5664215) show the use of store multiple instruction.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Denise Tran whose telephone number is (571) 272-4189. The examiner can normally be reached on Monday, Thursday, and an alternated Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim, can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Denise Tran

12/1/05